federal grazing fees are too low and the controversy will continue.

Summary

News story coverage of the grazing fee controversy commonly deals only with the fact that private grazing fees greatly exceed those charged on federal rangelands. This leads to a seemingly obvious conclusion that "federal grazing permittees are being subsidized." But federal grazing fees are only a small part of the total costs paid by ranchers who graze livestock on public lands. Federal range permittees also pay substantial non-fee costs, e.g. transportation and death loss costs, that they would not have to pay on private range leases. In addition, permittees incur the costs of interest on capital investment in the grazing permit.

It can be shown that the permittee's *total* costs of grazing federal range are about the same as leasing private range. However, as long as the government refuses to recognize the permittee's capital investment in grazing permits and the resulting interest costs, critics will continue to argue that federal grazing fees are too low.

You can still start trouble in Wyoming's cowboy bars just by mentioning grazing fees. And it's not likely that this controversy will soon go away.

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The Federal Grazing Fee: A Viewpoint

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Discussions of the federal grazing fee among ranchers, range managers, environmentalists, politicians, and other concerned parties are rarely without emotion and never without disagreement: fees are either too high or too low, and grazing either should or should not occur on federal lands. The decision process that governs the use of federal funds for grazing lands includes an economic analysis. We discuss the grazing values appropriate for use in these analyses and separate them from values having only accounting functions.

The mandates requiring public land managers to perform economic analyses of potential investments for federal land are motivated by the same concern that private ranchers have for their investments: both want to invest in practices that will help them achieve their objectives. This is not to imply that the objectives are the same. If economic analyses are performed with misinformation, the achievement of public or private goals might not be realized. The economic goals of government can be summarized as the achievement of efficiency and equity (sometimes called welfare). Efficiency provides for producing goods and services at the least possible expense and selecting the level of production that results in the greatest net returns. Equity deals with shifts in resource ownership, income distribution, who pays, who gets paid, and wealth of individuals and firms.

Many economically efficient states exist—each corresponds to its income distribution, resource endowment, technology, and taste and preference. Selection of the "best" state depends on a complex political process in which economic-equity analysis is but one integral step. Economic analysis offers useful information for pointing out incomes and wealth attainable under differing circumstances. Final decisions on equity for individuals and firms remains a political process.

Most economic analyses deal with profit, products, and costs. Results of these economic-efficiency analyses suggest optimal rates of production, use of resources, and an appropriate product mix to obtain the greatest net revenue or produce at the lowest possible cost within biological and economic constraints. Economic-equity analyses examine the distribution of resources and capital, analyze the tradeoffs and shifts associated with different distributions, and estimate the probable outcome of new policies and programs given some starting point. Changes in policy and programs that result from equity analyses must remain economically efficient to be politically acceptable over time. Thus, whether the goal is to redistribute resources and wealth or to achieve a given rate of production, society demands the elimination of waste.

What is the appropriate use of the federal grazing fee in analyses of economic efficiency and equity? When the efficiency of use of federal forage by a privately owned ranch is analyzed, the grazing fee is part of the cost of obtaining seasonal forage for livestock operations. The grazing fee is thus used in the analysis of a profit-maximizing ranch in the same way as is the cost of obtaining hay, grain, leased forage, or other resources. Nonfee costs are incurred and must be considered. Ranchers make production decisions on size of herd, purchase of related resources, and marketing based

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on expected costs and benefits. Benefits to the ranch are the value of goods sold, leased, and consumed. The primary market benefit to the ranch of grazing on federal lands is marketable livestock products. It is appropriate for ranchers to consider the grazing fee a component of the total cost and the value of livestock products sold to be the benefit.

In a competitive economy such as the United States', the measure of value is typically the market price. This price represents both the "value" that purchasers consider the item to be worth to them and the "value" they can receive for the item in the market. For most products, a price exists that reflects the same value to sellers as to buyers as determined by demand and supply. This is the price used by both producers and consumers to make purchase and investment decisions. If producers use the wrong price for a product when they construct a plant, the production capacity of the plant will not be the most efficient. This argument holds for private and public resources. For investment decisions on federal land, the appropriate value for forage should reflect a "price" equating the value ranchers recognize for its use and the value the federal government could receive if the resource were sold in a market. This does not imply that the nation should consider production or consumption only at the "market" rates. Equity considerations are weighed through means other than the market place and sometimes result in production and consumption rates being more politically acceptable than market rates.

Benefit and cost values must be consistent. The value of forage in studies on "fair market value" represent the value of forage in the production of livestock and is analogous to the stumpage price of timber; it is the price ranchers would be willing to pay for the forage. The grazing fee should not be confused with the current total price paid by the rancher (which includes nonfee user costs and investments) or with the value others might be willing to pay for use of the resource if it were competitively bid (as is timber).

The federal government has not allowed consideration of permit value. Permit value represents the extra price ranchers pay for land/livestock accompanied with the federal grazing privilege. This value was transferred from the government to the original permittees and then from permittee to permittee at market value. Grazing permits are bid on the open market when ranches sell. This value implies that the grazing is worth more to the ranch operation than the grazing fee. Who pays and who receives the benefit if the grazing is worth more than the fee? The answer is confounded by the permit value and the price paid by the existing permittee for the permit. The public clearly "owns" the forage, managed by the federal agencies so it could be reasoned that the resource owner should receive the full price of the value derived from the use of the resource. Most of the disparity between the grazing fee and the value derived from resource use is the price paid by the existing permittee for the permit. The original recipients of the grazing privilege (at the creation of grazing rights on federal lands) realized an increase in wealth through this granting of a permit at no initial cost. The wealth was realized when they sold their cattle or ranch with the added value of the permit. Those who bought ranches, cattle, and permits paid, up front, a portion of the total value derived from use of the resource as a permit value. The remainder of the total value exists to cover annual grazing fees, nonfee costs, and return on investment. Open bidding for permits conducted by the government would transfer wealth (permit value) from current permittees to the federal government. Increases in grazing fees will also have the effect of transferring wealth from ranchers to the federal government. Even if the allocation of permits and resultant grazing were to result in efficient use of the forage resource, the equity of income redistribution would be a concern to the livestock industry.

One way to estimate the value to society of the forage used from federal land by a permittee is to determine the value of the product derived from its use (i.e., marketable red-meat products). The contribution forage makes to red-meat production is multiplied by the market price of the meat. Ranch costs of using that forage (nonfee and fee costs) must be considered. An analysis using only the grazing fee as the value of forage underestimates the true value to society of the forage and results in recommendations for lower investment than is appropriate for society to benefit. The resources will be misallocated for economic efficiency. If the rancher considered the grazing fee as the total cost of using the forage, the rancher's decision would be to demand more forage than if nonfee costs were also considered. If the federal government only considered the grazing fee as the value of forage to society, the best decision would be to supply less forage than the efficient allocation would recommend. Equity concerns would become manifest given the nonefficient resource allocation.

The proper use of the grazing fee in analyses requires that the fee be recognized as a portion of the cost of using federal forage to produce marketable livestock and as a return to the treasury. The return to the treasury should not be confused with the value to society of forage use. The fee has no special significance as a benefit in efficiency analyses at the federal level but must be considered on the cost side of the analyses. The fee is an accounting value useful in determining return to the treasury. Current fees are administratively set by a complex interaction of Congressional committees, interest groups, and agencies expressed in laws, regulations, and policies. In general, political processes poorly mimic the competitive marketplace. That the fee is administratively determined suggests that society has deemed the market place inappropriate for allocating federal forage. Through control of the market for federal forage by administrative rules, the policy participants (Congressional committees, interest groups, and agencies) dictate a "more appropriate" distribution of resources. Economic analysis can determine the most efficient use of the resources given the distribution dictated by the political process. Economic analysis can also be used to analyze optimal use under several scenarios. The appropriate value for federal forage is the value society places on the outputs of the production process and not the return to the treasury. The political process can result in equating the two values, but because of equity considerations concerning the transfer of wealth, administrative feasibility, and other considerations, the process has not equated society's value with the grazing fee.

The argument presented here is not whether the fee is too high or too low, nor is it whether grazing on federal land should be discontinued or increased. We argue that before any decision is made affecting grazing on Federal land, an economic analysis should be made and that the grazing fee is not the appropriate measure of grazing value for those analyses. ●